

ABSTRACT OF THE DISCLOSURE

The present invention provides a method and apparatus by which functions may be derived from other functions in a programming language. A function is essentially processed as a class, except that the object is automatically destructed after the final line of code is executed. In one or more embodiments of the present invention, a function has the ability to inherit from a superfunction. Inheritance in this context means that all functions in the hierarchy execute in order from the lowest level superfunction to the derived function invoked by the calling statement. Further, the derived function has access to all nonprivate methods and variables defined in the superfunctions. All functions in the hierarchy remain instantiated until the derived function has executed. At this point, the functions are destructed in reverse hierarchical order. If a function in the hierarchy enters an error condition, the execution process is halted.